

GRADE CROSSING IMPROVEMENT,

BUFFALO, N. Y.

1888-1905.

JUN 7 1944

6 37 2





GRADE CROSSING IMPROVEMENT

BUFFALO, N. Y.

1888-1905



## BUFFALO GRADE CROSSING IMPROVEMENT—February, 1905

---

**T**HE abolition of the crossings at grade of the streets of Buffalo, by steam railroads, was authorized by Act of the Legislature of the State of New York, May, 1888.

This improvement has been in charge of the following

### COMMISSIONERS

ROBERT B. ADAM; appointed by Act, May, 1888; elected Chairman, May 31, 1888; died, June 30, 1904.

EDWARD H. BUTLER; appointed by Act, May, 1888; now in office.

FREDERICK KENDALL; appointed by Act, May, 1888; died, August 15, 1904.

WILLIAM J. MORGAN; appointed by Act, May, 1888; elected Secretary, May 31, 1888; died, September 5, 1900.

JAMES E. NUNAN; appointed by Act, May, 1888; died, December 16, 1891.

SOLOMON SCHEU; appointed by Act, May, 1888; died, November 23, 1888.

CHARLES A. SWEET; appointed by Act, May, 1888; died, October 1, 1903.

GEORGE SANDROCK; appointed by Act, May, 1888; died, February 12, 1902.

JOHN B. WEBER; appointed by Act, May, 1888; elected Secretary, September 21, 1900; now in office.

HENRY D. KIRKOVER; appointed by Act, May, 1892; now in office.

JAMES RYAN; appointed by Act, May, 1892; now in office.

AUGUSTUS F. SCHEU; appointed by Act, May, 1892; elected Chairman, February 21, 1905; now in office.

CHARLES F. BISHOP; appointed by Court, February 16, 1905; now in office.

JOHN ESSER; appointed by Court, February 16, 1905; now in office.

ANDREW LANGDON ; appointed by Court, February 16, 1905 ; now in office.

WILLIAM P. NORTHRUP ; appointed by Court, February 16, 1905 ; now in office.

HENRY SCHAEFER ; appointed by Court, February 16, 1905 ; now in office.

### STAFF

SPENCER CLINTON ; elected Attorney ; now in office.

GEORGE E. MANN ; Engineer while City Engineer, 1888-1893 ; appointed Chief Engineer, January, 1893 ; died, October 2, 1897.

EDWARD B. GUTHRIE ; appointed Chief Engineer, October 9, 1897 ; now in office.

The interval from 1888 to 1895 was taken up in negotiations with the several railroads and procuring contracts for the crossings of greatest importance in the business district. Actual construction was first undertaken at the Michigan Street crossing of the New York Central & Hudson River Railroad on May 22, 1895.

Since this date thirty-seven (37) structures have been completed, or practically so, which, with closing of streets, have eliminated sixty-five (65) crossings at grade. Five structures are yet to be built to complete the General Plan of the Commission.

The location, kind and cost of structures, land awards, that is purchase of land for opening or widening streets and the consequential damages so far determined, are shown in the following table.

In the summary of cost of structures, the sum of \$500,000 has been added for work along the railroad's right of way, which at least this work has cost and the amount does not appear in contracts or records, being paid wholly by the railroad interested.

The division of cost has been generally as follows :

	RAILROAD	CITY
Across the railroad's right of way,	100%	
Along " " "	100%	
Approaches to viaducts and subways,	66 $\frac{2}{3}$ %	33 $\frac{1}{3}$ %
Lands purchased, . . . . .	66 $\frac{2}{3}$ %	33 $\frac{1}{3}$ %
Consequential damages, . . . .	50%	50%

# COMPLETED VIADUCTS

STREETS	VIADUCTS		NUMBER OF CROSSINGS	NUMBER OF STRUCTURES
	RAILROADS CROSSED			
Commercial, . . .	{ N. Y. C. & H. R. R. }		{ 1 }	1
Main, . . .	{ " "		{ 1 }	
Washington, . . .	{ " "		1	1
Michigan, . . .	{ " "		1	1
Chicago, . . .	N. Y. C., W. S., Erie		1	1
Louisiana, . . .	{ " " " L. S.		1	1
Seneca, . . .	{ N. Y. C., W. S., W. N. Y. & P.		{ 1 }	2
Hamburg, . . .	{ N. Y. C., Erie, L. S., W. N. Y. & P.		{ 1 }	
Van Rensselaer, . . .	Erie		1	1
Seneca, . . .	{ Erie, B. C., W. N. Y. & P., N. Y. C. & St. L.		{ 1 }	2
Smith, . . .	{ Erie		{ 1 }	
Babcock, . . .	W. N. Y. & P.		1	1
Perry, . . .	L. S. & M. S.		1	1
Elk, . . .	{ L. S. & M. S., Erie }		{ 1 }	1
Abbott, . . .	{ Erie }		{ 1 }	
Elk, . . .	N. Y. C. & St. L., W. N. Y. & P., B. C.		1	1
Abbott, . . .	N. Y. C. & St. L., W. N. Y. & P., B. C.		1	1
Total, . . .			17	15

# SUBWAYS COMPLETED

STREETS	RAILROADS CROSSED	NUMBER OF CROSSINGS	NUMBER OF STRUCTURES
Swan, . . .	$\left\{ \begin{array}{l} \text{N. Y. C., W. S.,} \\ \text{W. N. Y. \& P.} \end{array} \right\}$	$\left\{ \begin{array}{l} 1 \end{array} \right\}$	1
Seymour, . . .	$\left\{ \begin{array}{l} \text{N. Y. C., W. S.,} \\ \text{W. N. Y. \& P.} \end{array} \right\}$	$\left\{ \begin{array}{l} 1 \end{array} \right\}$	
South Division,	N. Y. C., W. S., W. N. Y. & P.	1	1
North Division,	N. Y. C., W. S., W. N. Y. & P.	1	1
Emslie, . . .	N. Y. C., W. S., W. N. Y. & P.	1	1
Eagle, . . .	N. Y. C., W. S.	1	1
Clinton, . . .	" "	1	1
Lord, . . .	" "	1	1
Smith, . . .	" "	1	1
Oneida, . . .	" "	1	1
Howard, . . .	" "	1	1
Fillmore, . . .	" "	1	1
William, . . .	" "	1	1
Fillmore, . . .	W. N. Y. & P.	1	1
Clinton, . . .	W. S., B. C.	1	1
Clinton, . . .	Erie	1	1
Seneca, . . .	D., L. & W.	1	1
Elk, . . .	" "	1	1
Abbott, . . .	" "	1	1
Total, . . .		19	18

# CROSSINGS OF STREETS TO BE CLOSED IN CONNECTION WITH STRUCTURES

STREETS	RAILROADS CROSSED	IN CONNECTION WITH STRUCTURES	NUMBER OF CROSSINGS CLOSED
Jefferson, . .	N. Y. C., Erie, Seneca, Hamburg		2
Red Jacket, .	L. S. & M. S., Erie, . . . .	“ “	2
Carroll, . .	N. Y. C., W. N. Y. & P., .	“ “	1
Alabama, . .	N. Y. C., W. N. Y. & P., .	“ “	1
Mill, . . . .	Erie, . . . .	“ “	1
Hydraulic, .	“ . . . .	Van Rensselaer, .	1
Griffin, . .	“ . . . .	“ “	1
Exchange, . .	“ . . . .	Seneca, Smith, .	1
Scott, . . . .	L. S. & M. S.,	Seneca, Hamburg	1
Sandusky, . .	“ “	Elk, Abbott, . .	1
Mackinaw, . .	“ “	“ “	1
Grosvenor, . .	N. Y. C., W. S., W. N. Y. & P.,	Swan, Seymour, .	1
Anderson Al.,	N. Y. C., W. S., W. N. Y. & P.,	South Division, .	1
Lahban Alley,	N. Y. C., W. S., W. N. Y. & P.,	North Division, .	1
Bond, . . . .	N. Y. C., W. S.,	Eagle, . . . .	1
James, . . . .	“ “	“ . . . .	1
Fritz Alley, .	“ “	Clinton, . . . .	1
St. Domingo Alley, . . . .	“ “	Smith, . . . .	1
Bristol, . . .	“ “	“ . . . .	1
Montgomery, .	“ “	“ . . . .	1
Clare (Raze),	“ “	Oneida, . . . .	1
Babcock, . .	Erie, . . . .	Clinton, . . . .	1
Abby, . . . .	D., L. & W.,	Abbott, . . . .	1

Total to be closed in connection with structures completed, twenty-five (25).

## FOOT BRIDGES COMPLETED

STREETS	RAILROADS CROSSED	NUMBER OF CROSSINGS	NUMBER OF
Pearl, .	N. Y. C. & H. R.	1	1
Franklin, .	“ “	1	1
Perry, .	N. Y. C. & St. L., B. C., W. N. Y. & P.	1	1
Fulton, .	L. S. & M. S.	1	1 partially done
	Total, . . . .	4	4

## STRUCTURES TO COMPLETE GENERAL PLAN

STREETS	RAILROADS CROSSED	NUMBER OF CROSSINGS	NUMBER OF
Perry, .	Erie	1	1 viaduct
William, .	“	1	1 subway
Fulton, .	“	1	1 foot bridge
Elk, . .	“	1	1 “ “
Prenatt, .	N. Y. C. & St. L., B. C., W. N. Y. & P.	1	1 “ “
	Total, . . . .	5	5

## SUMMARY

STRUCTURES	VIADUCTS, NUMBER		SUBWAYS, NUMBER		FOOT BRIDGES, NUMBER		NUMBER  STREETS CLOSED
	CROSS- INGS	STRUC- TURES	CROSS- INGS	STRUC- TURES	CROSS- INGS	STRUC- TURES	
Completed,	17	15	19	18	4	4	25
To Complete	1	1	1	1	3	3	
Total, . .	18	16	20	19	7	7	25



In the foregoing list a crossing is considered as including all the railroads intersecting any street at or near the same point, and in this sense 70 crossings will be abolished by the 42 structures, and closing 25 streets. While insufficient time has elapsed to appreciate the full benefit of this improvement, it is of interest to note the decrease in fatal accidents to others than railway employees at grade crossings in the City, notwithstanding the fact that for the latest period mentioned below some of the structures were not commenced. For 31 months in each of the periods there were

From January 1st, 1890, to August 1st,  
1892, 55 Fatal Accidents.

From May 1st, 1902, to December 1st,  
1904, 24 Fatal Accidents.

Difference . . . . . 31

The construction of viaducts and subways was not commenced until 1895, so the first period precedes all such work, and the reduction in number of accidents during the last amounts to one per month.

#### COST OF COMPLETED STRUCTURES

	CITY	RAILROADS	TOTAL
Right of way work,		\$500,000.00	\$500,000.00
Construction, . .	\$824,693.96	3,005,555.08	3,830,249.04
Lands purchased,	292,697.86	575,254.94	867,952.80
Total, . . . .	\$1,117,391.82	\$4,080,810.02	\$5,198,201.84
Per cent, . . .	21.5	78.5	
Consequential			
Damages, . . .	\$1,055,101.84	\$980,143.07	\$2,035,244.91
Total, . . . .	\$2,172,493.66	\$5,060,953.09	\$7,233,446.75

#### ESTIMATED COST OF STRUCTURES TO COMPLETE

	CITY	RAILROADS	TOTAL
Construction, . .	\$60,885.79	\$172,266.57	\$233,152.36

# COMPLETED STRUCTURES

JANUARY, 1905

LOCATION	COST OF STRUCTURES		TOTAL COST OF STRUC- TURES	LAND AWARDS*		CONSEQUENTIAL DAMAGES		TOTAL COST		GRAND TOTAL	REMARKS
	CITY	RAILROADS		CITY	RAIL- ROADS	CITY	RAIL- ROADS	CITY	RAILROADS		
1 Main Street and Terrace, . . .	\$ 8,068.82	\$ 91,786.94	\$ 99,855.76			\$ 18,697.71	\$ 18,697.71	\$ 26,766.53	\$ 110,484.65	\$ 197,251.18	Damages not complete.
2 Washington Street, . . . . .	3,754.98	33,347.18	37,102.16			16,762.18	13,927.16	20,517.16	47,274.34	67,791.50	
3 Michigan Street, . . . . .	26,412.40	99,586.34	125,998.74	\$ 58,861.63	\$ 117,723.27	50,717.37	50,717.37	135,991.40	268,026.98	404,018.38	Damages include land for Scott St. extension. Damages not complete.
4 Chicago Street, . . . . .	47,967.85	129,057.24	177,025.09	75,324.06	150,648.13	31,172.71	31,172.71	154,464.62	310,878.08	465,342.70	
5 Seneca and Hamburg streets, . .	77,297.77	277,088.83	354,386.60	21,547.21	43,094.41	195,495.73	195,373.06	294,340.71	515,556.30	809,897.01	Damages include land for Scott St. extension. Damages not complete.
6 Swan and Seymour streets, . . .	7,248.36	90,617.44	97,865.80	10,721.08	21,442.16	34,349.57	34,349.58	52,319.01	146,409.18	198,728.19	
7 South Division Street, . . . . .	3,007.39	72,349.08	75,356.47			13,252.02	13,252.01	16,259.41	85,601.09	101,860.50	Damages not complete.
8 William Street (N. Y. C.), . . .	8,832.44	86,085.79	94,918.23	7,405.03	14,810.06	33,606.27	33,606.27	49,843.74	134,502.12	184,345.86	
9 Clinton Street (Erie), . . . . .	18,686.98	110,083.05	128,770.03	9,409.60	18,819.19	33,383.58	33,383.58	61,480.16	162,285.82	223,765.98	Damages not complete.
10 Seneca and Smith streets, . . .	71,620.65	203,085.99	274,706.64			241,412.48	241,412.49	313,033.13	444,498.48	757,531.61	
11 Babcock Street, . . . . .	29,467.54	94,996.76	124,464.30	6,943.23	13,886.47	83,373.22	83,373.23	119,783.99	192,256.46	312,040.45	Damages not complete.
12 Elk Street and Abbott Road, . .	81,923.73	219,631.08	301,557.81	37,807.41	75,614.82	144,250.29	144,250.31	263,981.43	439,499.21	703,480.64	
13 Abbott Road (B. C. R. R.), . . .	69,971.25	128,541.35	198,512.60			144,379.39	86,627.59	214,350.64	215,168.94	429,519.58	Damages not complete.
14 Seneca Street (D., L. & W.), . .	21,979.95	21,979.95	43,959.90			14,249.32		36,229.27	21,979.95	58,209.22	
15 Elk St. and Abbott Rd. " . . .	61,998.36	61,998.36	123,996.72	5,070.40				67,068.76	61,998.36	129,067.12	Land Awards not complete.
16 Louisiana Street, . . . . .	53,435.97	138,477.88	191,913.85	59,608.21	119,216.43			113,044.18	257,694.31	370,738.49	
17 Elk Street (B. C. R. R.), . . .	71,718.85	115,110.37	186,829.22					71,718.85	115,110.37	186,829.22	Land Awards not complete.
18 Van Rensselaer Street, . . . . .	48,556.37	75,653.72	124,210.09					48,556.37	75,653.72	124,210.09	
19 Fillmore Avenue (W. N. Y. & P.,	13,720.53	63,321.66	77,042.19					13,720.53	63,321.66	77,042.19	Land Awards not complete.
20 Perry Street (L. S. & M. S.), . .	41,316.08	144,186.69	185,502.77					41,316.08	144,186.19	185,502.77	
21 Perry Street (Foot Bridge), . . .	3,244.09	12,749.67	15,993.76					3,244.09	12,749.67	15,993.76	Land Awards not complete.
22 Clinton Street (B. C. & W. S.), .	5,058.12	64,896.55	69,954.67					5,058.12	64,896.55	69,954.67	
23 Scott Street (Extension), . . . .	2,093.31	2,093.31	4,186.62					2,093.31	2,093.31	4,186.62	In lieu of Consequential Damages.
24 Smith Street (Widening), . . . .	2,447.83	2,447.83	4,895.66					2,447.83	2,447.83	4,895.66	
25 Hardwood Pl. and Scatcherd St.,	2,680.15	2,680.14	5,360.29					2,680.15	2,680.14	5,360.29	In lieu of Consequential Damages.
26 Intercepting Sewer, . . . . .	7,791.42	13,967.32	21,758.74					7,791.42	13,967.32	21,758.74	

27 North Division Street.	\$ 4,255.68	\$ 79,817.34	\$ 84,073.02	\$ 4,255.68	\$ 79,817.34	\$ 84,073.02
28 Emslie Street.	2,946.57	66,632.38	69,578.95	2,946.57	66,632.38	69,578.95
29 Eagle Street.	3,263.28	73,722.18	76,985.46	3,263.28	73,722.18	76,985.46
30 Clinton Street.	2,978.09	74,915.78	77,893.87	2,978.09	74,915.78	77,893.87
31 Lord Street.	2,011.90	53,055.30	55,067.20	2,011.90	53,055.30	55,067.20
32 Smith Street.	2,405.41	52,106.31	54,511.72	2,405.41	52,106.31	54,511.72
33 Oneida Street.	2,883.82	72,623.60	75,507.42	2,883.82	72,623.60	75,507.42
34 Fillmore Ave. and Howard St.	10,397.35	135,197.68	145,595.03	10,397.35	135,197.68	145,595.03
35 Howard Street (W. S. R. R.).	1,700.00	17,509.25	19,209.25	1,700.00	17,509.25	19,209.25
36 Howard Street (B. C. R. R.).		11,161.41	11,161.41		11,161.41	11,161.41
37 Fulton Street (Foot Bridge).	1,550.67	12,990.33	14,541.00	1,550.67	12,990.33	14,541.00

Final estimates not made but  
work practically completed.  
Total cost based on proposals.

TOTALS. \$824,693.96 \$3,005,555.08 \$3,830,249.04 \$292,607.86 \$575,254.94 \$1,055,101.84 \$980,143.07 \$2,172,493.66 \$4,560,953.09 \$6,733,446.75

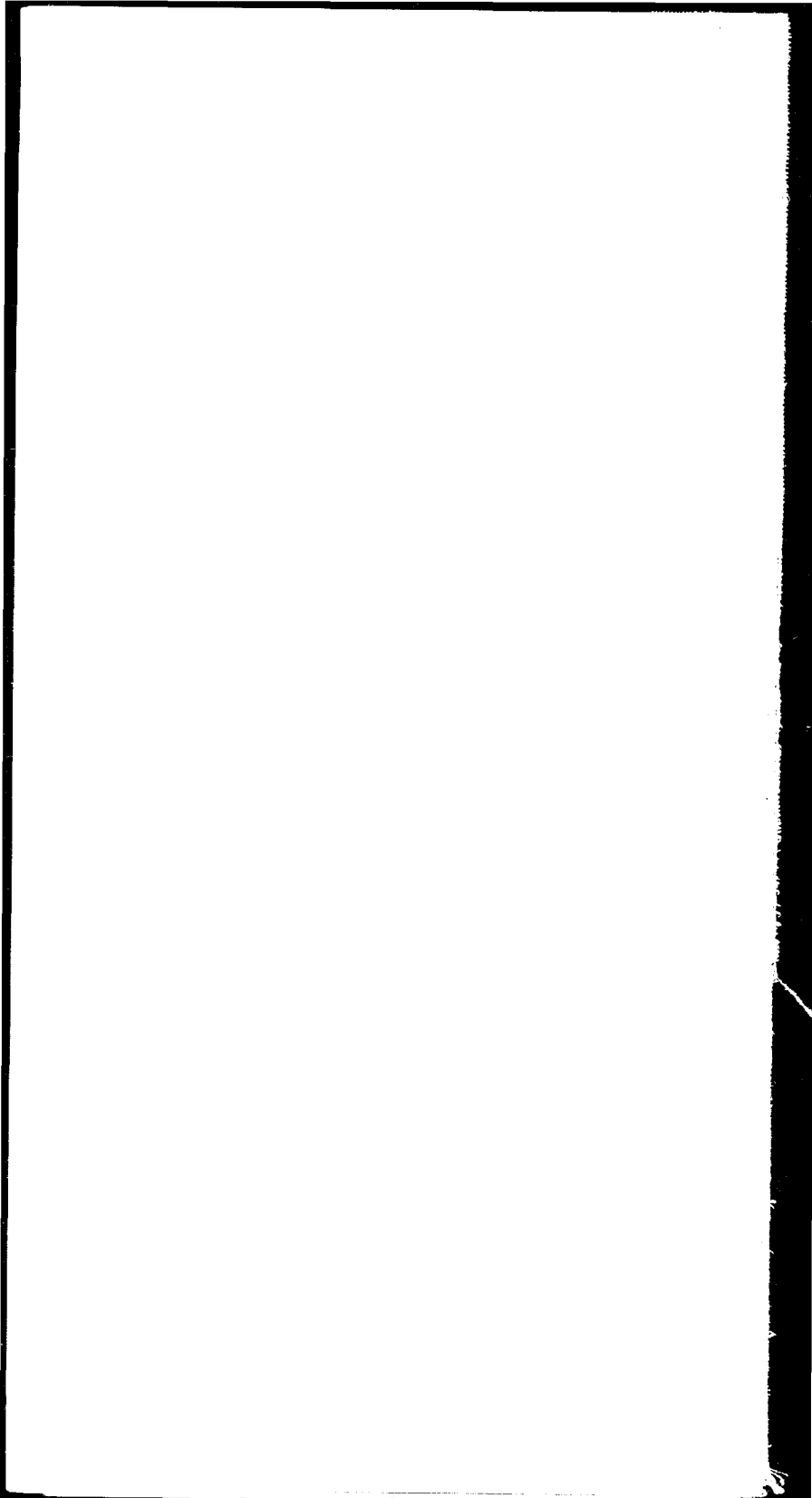
\* Purchase of lands for widening, opening, and extending streets.

## STRUCTURES NECESSARY TO COMPLETE GENERAL PLAN

LOCATION	ESTIMATED COST OF STRUCTURES		TOTAL COST	REMARKS
	CITY	RAILROADS		
1 William Street (Erie R. R.).	\$15,049.00	\$ 38,700.00	\$ 53,749.00	
2 Perry Street " "	40,396.79	109,806.57	150,203.36	
3 Fulton Street (Foot Bridge, Erie R. R.)	720.00	6,280.00	7,000.00	
4 Elk Street " "	720.00	5,480.00	6,200.00	
5 Prenatt Street " " B. C. "	4,000.00	12,000.00	16,000.00	
TOTALS.	\$60,885.79	\$172,266.57	\$233,152.36	











**Explanation**

- VIADUCT
- SUBWAY
- FOOT-BRIDGE
- STREET CLOSED BY CONTRACT
- RAILROAD TRACK AT GRADE
- RAILROAD TRACK-ELEVATED

*Figures denote ground elevations*

# BUFFALO GRADE CROSSING IMPROVEMENT

STRUCTURES BUILT AND PROPOSED TO DATE

OFFICE OF COMMISSIONERS  
JUNE, 1899

TO COMPLETE GENERAL PLAN